

REMARKS

The present invention is directed to a golf club having a specific relationship between the gravity point of its relatively large-sized club head and the torsional rigidity of the club shaft which rebounds fully at impact. The problems solved by the present invention can best be seen by referring to Figs. 7(a) and 7(b) which show the rotational angle of the club head around the club shaft central line. If the torque  $T$  of the shaft is more than a specific amount, it becomes difficult for a golfer to square the clubface at the time of impact. On the other hand, if the torque is less than a specific amount, it is difficult to effectively increase the head speed of the golf club. According to the present invention, the Applicant has identified a relationship between the torque ( $T$ ) of the golf club shaft in a gravity point distance ( $L$ ) which is effective in squaring the golf club head at impact utilizing golf clubs having a golf club head with a volume of not less than 250 cc. The Applicant has determined that the torque of the golf club shaft can be adjusted by changing a number of parameters, for example, the number of PREPEG pieces  $P$ , the shape and/or size of each PREPEG piece  $P$ , the orientation angle  $\delta$  of the reinforced fibers therein and the like. Thus, the Applicant has not only established a necessary relationship between the torque and the gravity point of the club head for achieving the ability to square the club head at impact, but also has determined what

parameters can be utilized in the golf club to change the torque (T) in the gravity point distance (L) of the golf ball.

Although the Examiner has newly cited U.S. Patent No. 6,213,888, Kawaguchi et al., the Examiner has indicated that claims 7-11 have been allowed. The newly added method claims 12-15 retain the allowable subject matter of claim 7-11, that is the step of determining whether the torque and gravity point distance satisfies the equations as defined in claim 7 and 10, as recognized in paragraph 5 of the Examiners Office Action, but in addition specifies that the method of the present invention is directed to a wood-type golf club, said claims containing other minor refinements. Accordingly, it is believed that newly added claims 12-15 are allowed for the same reasons as claims 7-11 have been allowed. Accordingly, in view of the above amendments and remarks, it is now believed the present application including newly added claims 12-15 is now condition for allowance and thus, an early Notice of Allowance is respectfully requested.

Conclusion


Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Mr. Joseph A. Kolasch (Reg. No. 22,463) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant respectfully petitions for a two-month extension of time for filing a reply in connection with the present application, and the required fee of \$450.00 is attached hereto.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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